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halothane but not isoflurane attenuates interleukin 1β-induced nitric oxide synthase in vascular smooth muscle (LI) [Maeda et al.], 492
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inflammatory pain and hypersensitivity are selectively reversed by epidural bupivacaine and are developmentally regulated (LI) [Howard et al.], 421
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desflurane confers neurologic protection for deep hypothermic circulatory arrest in newborn pigs (LI) [Kurth et al.], 959
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dose-dependent enhancement of *in vivo* $GABA_A$-benzodiazepine receptor binding by isoflurane (CI) [Gyulai et al.], 585
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effects of desflurane and sevoflurane on length-dependent regulation of myocardial function in coronary surgery patients (CI) [De Hert et al.], 357
effects of halothane on sarcoplasmic reticulum calcium release channels in porcine airway smooth muscle cells (LI) [Pabelick et al.], 207
effects of mild hypothermia on blood-brain barrier disruption during isoflurane or pentobarbital anesthesia (LI) [Chi et al.], 933
effects of sevoflurane on excitatory neurotransmission to medullary expiratory neurons and on phrenic nerve activity in a decerebrate dog model (LI) [Stucke et al.], 485
effects of the anesthetic gases xenon, halothane, and isoflurane on calcium and potassium currents in human atrial cardiomyocytes (LI) [Hüneke et al.], 999
effects of volatile anesthetics on N-methyl-D-aspartate excitotoxicity in primary rat neuronal-glial cultures (LI) [Kudo et al.], 756
enflurane actions on spinal cords from mice that lack the β_3 subunit of the $GABA_A$ receptor (LI) [Wong et al.], 154
fatal hepatitis associated with isoflurane exposure and CYP2A6 autoantibodies (CR) [Martin et al.], 551
halothane but not isoflurane attenuates interleukin 1β-induced nitric oxide synthase in vascular smooth muscle (LI) [Maeda et al.], 492
halothane-dependent lipid peroxidation in human liver microsomes is catalyzed by cytochrome P4502A6 (CYP2A6) (LI) [Minoda and Kharasch], 509
halothane inhibits contraction and action potential duration to a greater extent in subendocardial than subepicardial myocytes from the rat left ventricle (LI) [Rithalia et al.], 1213
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Lung, blood flow
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Lung, gas exchange
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Lung, independent ventilation
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Lung, injury
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Lung, mechanics
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Lung, respiratory failure
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Midazolam
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a double-blind, randomized comparison of IV lorazepam *versus* midazolam for sedation of ICU patients *via* a pharmacologic model (CI) [Barr et al.], 286

Milrinone
possible involvement of cyclic adenosine monophosphate-independent mechanism in the positive chronotropic effect of norepinephrine in the isolated guinea pig right atrium (LI) [Asada and Endou], 437

Minimum alveolar concentration (MAC)
antagonism of the 5-HT_3 receptor does not alter isoflurane MAC in rats (LR) [Rampil et al.], 562
are estimates of MAC reliable? (CI) [Paul et al.], 1362
minimum alveolar concentration of volatile anesthetics in rats during postnatal maturation (LI) [Orliaguet et al.], 734

Mitochondria
anesthetic effects of mitochondrial ATP-sensitive K channel (LI) [Kohro et al.], 1435
lidocaine and mexiletine inhibit mitochondrial oxidation in rat ventricular myocytes (LI) [Tsutsumi et al.], 766

Mivacurium
differential sensitivity of abdominal muscles and the diaphragm to mivacurium: an electromyographic study (CI) [Kirov et al.], 1323
response to mivacurium in a patient compound heterozygous for a novel and a known silent mutation in the butyrylcholinesterase gene: genotyping by sequencing (CI) [Gätke et al.], 600 *in vitro* effects of fluoride on pseudocholinesterase activity and the metabolism of the cis-trans and trans-trans isomers of mivacurium (LR) [Wiesner et al.], 806

Models and modeling
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antagonism of the 5-HT_3 receptor does not alter isoflurane MAC in rats (LR) [Rampil et al.], 562
antiallodynic effect of intrathecal neostigmine is mediated by spinal nitric oxide in a rat model of diabetic neuropathic pain (LI) [Chen et al.], 1007
are estimates of MAC reliable? (CI) [Paul et al.], 1362
autosomal dominant canine malignant hyperthermia is caused by a mutation in the gene encoding the skeletal muscle calcium release channel (RYR1) (LI) [Roberts et al.], 716
brain expression of inducible cyclooxygenase-2 (COX-2) messenger-RNA (mRNA) in rats undergoing cardiopulmonary bypass (LI) [Hindman et al.], 1380
cardiopulmonary bypass induces neurologic and neurocognitive dysfunction in the rat (LI) [Mackensen et al.], 1485
cervico-medullary intrathecal injection of morphine produces antinociception in the orofacial formalin test in the rat (LI) [Grabow et al.], 1427
comparison of five experimental pain tests to measure analgesic effects of alfentanil (CI) [Luginbühl et al.], 22
consumption of soy diet before nerve injury preempts the development of neuropathic pain in rats (LI) [Shir et al.], 1238
desflurane confers neurologic protection for deep hypothermic circulatory arrest in newborn pigs (LI) [Kurth et al.], 959
distribution of the probability of survival is a strategic issue for randomized trials in critically ill patients (CI) [Riou et al.], 56
a double-blind, randomized comparison of IV lorazepam *versus* midazolam for sedation of ICU patients *via* a pharmacologic model (CI) [Barr et al.], 286
effects of bupivacaine and ropivacaine on high-voltage-activated calcium currents of the dorsal horn neurons in newborn rats (LI) [Liu et al.], 139
effects of halothane on sarcoplasmic reticulum calcium release channels in porcine airway smooth muscle cells (LI) [Pabelick et al.], 207
effects of sevoflurane on excitatory neurotransmission to medullary expiratory neurons and on phrenic nerve activity in a decerebrate dog model (LI) [Stucke et al.], 485
effects of thoracic epidural anesthesia with and without autonomic nervous system blockade on cardiac monophasic action potentials and effective refractoriness in awake dogs (LI) [Meissner et al.], 132
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increased sensitivity to depolarizing and nondepolarizing neuromuscular blocking agents in young rat hemidiaphragms (LI) [Fortier et al.], 478
influence of voltage-sensitive Ca^{++} channel drugs on bupivacaine infiltration anesthesia in mice (LI) [Smith et al.], 1189
inhaled furosemide inhibits behavioral response to airway occlusion in anesthetized cats (LI) [Nehashi et al.], 1234
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isoflurane and sevoflurane anesthesia in pigs with a preexistent gas exchange defect (LI) [Kleinsasser et al.], 1422
ketamine inhibits endotoxin-induced shock in rats (LI) [Taniguchi et al.], 928
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lesions of the basolateral amygdala complex block propofol-induced amnesia for inhibitory avoidance learning in rats (LI) [Alkire et al.], 708
lidocaine and mexiletine inhibit mitochondrial oxidation in rat ventricular myocytes (LI) [Tsutsumi et al.], 766
low-concentration lidocaine rapidly inhibits axonal transport in cultured mouse dorsal root ganglion neurons (LI) [Kanai et al.], 675
mechanisms of direct inhibitory action of propofol on uterine smooth muscle contraction in pregnant rats (LI) [Tsujiguchi et al.], 1245
minimum alveolar concentration of volatile anesthetics in rats during postnatal maturation (LI) [Orliaguet et al.], 734
morphine-induced spinal release of adenosine is reduced in neuropathic rats (LI) [Sandner-Kiesling et al.], 1455
myocardial and coronary effects of propofol in rabbits with compensated cardiac hypertrophy (LI) [Ouattara et al.], 699
neuroprotective effect of low-dose lidocaine in a rat model of transient focal cerebral ischemia (LI) [Lei et al.], 445

nitrogen at raised pressure interacts with the $GABA_A$ receptor to produce its narcotic pharmacological effect in the rat (LI) [David et al.], 921
nitrous oxide activates GABAergic neurons in the spinal cord in Fischer rats (LI) [Hashimoto et al.], 463
opioid action on respiratory neuron activity of the isolated respiratory network in newborn rats (LI) [Takeda et al.], 740
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preferential block of small myelinated sensory and motor fibers by lidocaine: *in vivo* electrophysiology in the rat sciatic nerve (LI) [Gokin et al.], 1441
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(1) seeking an integrated model of anesthetic action; (2) what are "relevant" concentrations? (CO) [Eger], 1538 (reply)
(1) seeking an integrated model of anesthetic action; (2) what are "relevant" concentrations? (CO) [Gottschalk], 1536
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stereospecific effects of pregabalin on ectopic afferent discharges and neuropathic pain induced by sciatic nerve ligation in rats (LI) [Chen et al.], 1473
transfer half-life of morphine-6-β-glucuronide from plasma to effect site assessed by pupil size measurement in healthy volunteers (CI) [Lotsch et al.], 1329
unventilated airway is time-dependently constricted in paralyzed dogs (LI) [Hirota et al.], 1480
the validity of performance assessments using simulation (CI) [Devitt et al.], 36

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brain expression of inducible cyclooxygenase-2 (COX-2) messenger-RNA (mRNA) in rats undergoing cardiopulmonary bypass (LI) [Hindman et al.], 1380
gene therapy for the management of pain: part II: molecular targets (RA) [Wu et al.], 216
North American malignant hyperthermia population: screening of the ryanodine receptor gene and identification of novel mutations (CI) [Sambuughin et al.], 594

Monitoring
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bispectral index monitoring during sedation with sevoflurane, midazolam, and propofol (CI) [Ibrahim et al.], 1151
the corrugator supercilii, not the orbicularis oculi, reflects rocuronium neuromuscular blockade at the laryngeal adductor muscles (CI) [Plaud et al.], 96
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transfer half-life of morphine-6-β-glucuronide from plasma to effect site assessed by pupil size measurement in healthy volunteers (CI) [Lotsch et al.], 1329
venous air embolism during endoscopic strip craniectomy for repair of craniosynostosis in infants (CI) [Tobias et al.], 340
wavelet analysis of middle latency auditory evoked responses: calculation of an index for detection of awareness during propofol administration (CI) [Kochs et al.], 1141

Morphine
cervico-medullary intrathecal injection of morphine produces antinociception in the orofacial formalin test in the rat (LI) [Grabow et al.], 1427
local administration of morphine for analgesia after iliac bone graft harvest (CI) [Reuben et al.], 390
morphine-induced spinal release of adenosine is reduced in neuropathic rats (LI) [Sandner-Kiesling et al.], 1455
preemptive analgesia by intravenous low-dose ketamine and epidural morphine (CO) [McCulloch et al.], 565
spinal endogenous acetylcholine contributes to the analgesic effect of systemic morphine in rats (LI) [Chen and Pan], 525
transfer half-life of morphine-6-β-glucuronide from plasma to effect site assessed by pupil size measurement in healthy volunteers (CI) [Lotsch et al.], 1329

Mortality
cardiac and neurologic complications identify risks for mortality for both men and women undergoing coronary artery bypass graft surgery (CI) [Hogue et al.], 1074
fatal hepatitis associated with isoflurane exposure and CYP2A6 autoantibodies (CR) [Martin et al.], 551
postoperative sudden death in two adolescents with myelomeningocele and unrecognized arrhythmogenic right ventricular dysplasia (CR) [Houfani et al.], 257
two cases of fatal thrombosis after aminocaproic acid therapy and deep hypothermic circulatory arrest (CR) [Fanshawe et al.], 1525

Myasthenia gravis
comparison between sevoflurane and propofol neuromuscular effects in a patient with myasthenia gravis: effective doses of vecuronium (CR) [Itoh and Shibata], 803
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Myelomeningocele
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Myocardial electrophysiology. *See* **Electrophysiology**

Myocardial infarct/infarction
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Myocardial ischemia. *See* **Coronary circulation and myocardial ischemia**

Myocardium
effect of volatile anesthetics on the force-frequency relation in human ventricular myocardium: the role of the sarcoplasmic reticulum calcium-release channel (CI) [Schotten et al.], 1160
interaction of protamine with α- and β-adrenoceptor stimulations in rat myocardium (LI) [David et al.], 1226

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Nasal administration
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rhinorrhea by nasal fentanyl (CO) [Ueda], 812

Nausea, vomiting, and antiemetics
preoperative intradermal acupuncture reduces postoperative pain, nausea and vomiting, analgesic requirement, and sympathoadrenal responses (CI) [Kotani et al.], 349
randomized controlled trial of total intravenous anesthesia with propofol *versus* inhalation anesthesia with isoflurane-nitrous oxide: postoperative nausea and vomiting and economic analysis (CI) [Visser et al.], 616

Neostigmine
antiallodynic effect of intrathecal neostigmine is mediated by spinal nitric oxide in a rat model of diabetic neuropathic pain (LI) [Chen et al.], 1007

Nerve blocks. *See also* **Local anesthesia and anesthetics; Regional anesthesia and analgesia**
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attempted interscalene block procedures (CO) [Benumof], 1304
attempted interscalene block procedures (CO) [Bittar], 1303
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drug-induced liver disease during continuous epidural block with bupivacaine (CR) [Yokoyama et al.], 259
how to prevent catastrophic complications when performing interscalene blocks (CO) [Chelly et al.], 1302
ophthalmic blocks at the medial canthus (CO) [Lopatka et al.], 1533
ophthalmic blocks at the medial canthus (CO) [Ripart], 1533 (reply)
performing an interscalene block during general anesthesia must be the exception (CO) [Borgeat et al.], 1302
persistent phrenic nerve paralysis following interscalene brachial plexus block (CR) [Robaux et al.], 1519
preferential block of small myelinated sensory and motor fibers by lidocaine: *in vivo* electrophysiology in the rat sciatic nerve (LI) [Gokin et al.], 1441
prolonged Horner syndrome due to neck hematoma after continuous interscalene block (CR) [Ekatodramis et al.], 801
sedation caused by local anesthetic blockade (CO) [Fry], 271
sedation caused by local anesthetic blockade (CO) [Pollock et al.], 271
thoracic paravertebral block (RA) [Karmakar], 771
training requirements for peripheral nerve blocks (CO) [Hadzic et al.], 1303
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Nerve conduction
local anesthetic properties of prenylamine (LI) [Mujtaba et al.], 1198
preferential block of small myelinated sensory and motor fibers by lidocaine: *in vivo* electrophysiology in the rat sciatic nerve (LI) [Gokin et al.], 1441
stereospecific effects of pregabalin on ectopic afferent discharges and neuropathic pain induced by sciatic nerve ligation in rats (LI) [Chen et al.], 1473
Nerve injury
consumption of soy diet before nerve injury preempts the development of neuropathic pain in rats (LI) [Shir et al.], 1238
persistent phrenic nerve paralysis following interscalene brachial plexus block (CR) [Robaux et al.], 1519
prolonged Horner syndrome due to neck hematoma after continuous interscalene block (CR) [Ekatodramis et al.], 801
Nerve physiology and function
local anesthetic properties of prenylamine (LI) [Mujtaba et al.], 1198
preferential block of small myelinated sensory and motor fibers by lidocaine: *in vivo* electrophysiology in the rat sciatic nerve (LI) [Gokin et al.], 1441
stereospecific effects of pregabalin on ectopic afferent discharges and neuropathic pain induced by sciatic nerve ligation in rats (LI) [Chen et al.], 1473
Neurologic complications. *See also* **Nerve injury**
cardiac and neurologic complications identify risks for mortality for both men and women undergoing coronary artery bypass graft surgery (CI) [Hogue et al.], 1074
Neurology and neurologic examination
impact of spinal cord stimulation on sensory characteristics in complex regional pain syndrome type I (CI) [Kemler et al.], 72
prospective randomized trial of normothermic *versus* hypothermic cardiopulmonary bypass on cognitive function after coronary artery bypass graft surgery (CI) [Grigore et al.], 1110
Neuromuscular transmission and blockade
anesthetic management for patients with postpolio syndrome receiving electroconvulsive therapy (CR) [Liu and Modell], 799
comparison between sevoflurane and propofol neuromuscular effects in a patient with myasthenia gravis: effective doses of vecuronium (CR) [Itoh and Shibata], 803
concentration-effect relationship of cisatracurium at three different dose levels in the anesthetized patients (CI) [Bergeron et al.], 314
the corrugator supercilii, not the orbicularis oculi, reflects rocuronium neuromuscular blockade at the laryngeal adductor muscles (CI) [Plaud et al.], 96
differential sensitivity of abdominal muscles and the diaphragm to mivacurium: an electromyographic study (CI) [Kirov et al.], 1323
different patterns of mast cell activation by muscle relaxants in human skin (CI) [Koppert et al.], 659
effects of rapacuronium on respiratory function during general anesthesia: a comparison with *cis*-atracurium (CI) [Tobias et al.], 908
extremely prolonged vecuronium clearance in a brain death case (CR) [Kainuma et al.], 1023
Hofmann, Schmofmann: atracurium undergoes Michael elimination (CO) [Alston], 273
increased sensitivity to depolarizing and nondepolarizing neuromuscular blocking agents in young rat hemidiaphragms (LI) [Fortier et al.], 478
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precipitation of thiopental by rapacuronium (CO) [Schmidt et al.], 273
response to mivacurium in a patient compound heterozygous for a novel and a known silent mutation in the butyrylcholinesterase gene: genotyping by sequencing (CI) [Gätke et al.], 600
the staircase phenomenon: implications for monitoring of neuromuscular transmission (CI) [Kopman et al.], 403
the substitute for the intravenous route (CO) [Donati and Guay], 1041
the substitute for the intravenous route (CO) [Weiss], 1040 *in vitro* effects of fluoride on pseudocholinesterase activity and the metabolism of the cis-trans and trans-trans isomers of mivacurium (LR) [Wiesner et al.], 806
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effects of bupivacaine and ropivacaine on high-voltage-activated calcium currents of the dorsal horn neurons in newborn rats (LI) [Liu et al.], 139
effects of sevoflurane on excitatory neurotransmission to medullary expiratory neurons and on phrenic nerve activity in a decerebrate dog model (LI) [Stucke et al.], 485
interaction of volatile anesthetics with human Kv channels in relation to clinical concentrations (LI) [Friederich et al.], 954
local anesthetic properties of prenylamine (LI) [Mujtaba et al.], 1198
low-concentration lidocaine rapidly inhibits axonal transport in cultured mouse dorsal root ganglion neurons (LI) [Kanai et al.], 675
Neuropathy
antiallodynic effect of intrathecal neostigmine is mediated by spinal nitric oxide in a rat model of diabetic neuropathic pain (LI) [Chen et al.], 1007
consumption of soy diet before nerve injury preempts the development of neuropathic pain in rats (LI) [Shir et al.], 1238
morphine-induced spinal release of adenosine is reduced in neuropathic rats (LI) [Sandner-Kiesling et al.], 1455
sickle cell-induced peripheral neuropathy following spinal anesthesia for cesarean delivery (CR) [Tsen and Cherayil], 1298
stereospecific effects of pregabalin on ectopic afferent discharges and neuropathic pain induced by sciatic nerve ligation in rats (LI) [Chen et al.], 1473
Neuroprotection
desflurane confers neurologic protection for deep hypothermic circulatory arrest in newborn pigs (LI) [Kurth et al.], 959
neuroprotective effect of low-dose lidocaine in a rat model of transient focal cerebral ischemia (LI) [Lei et al.], 445
Neurosurgical anesthesia
venous air embolism during endoscopic strip craniectomy for repair of craniosynostosis in infants (CI) [Tobias et al.], 340
Neurotransmitter release and uptake
widespread inhibition of sodium channel-dependent glutamate release from isolated nerve terminals by isoflurane and propofol (LI) [Lingamaneni et al.], 1460

Newborn
desflurane confers neurologic protection for deep hypothermic circulatory arrest in newborn pigs (LI) [Kurth et al.], 959
effects of bupivacaine and ropivacaine on high-voltage-activated calcium currents of the dorsal horn neurons in newborn rats (LI) [Liu et al.], 139
increased sensitivity to depolarizing and nondepolarizing neuromuscular blocking agents in young rat hemidiaphragms (LI) [Fortier et al.], 478
inflammatory pain and hypersensitivity are selectively reversed by epidural bupivacaine and are developmentally regulated (LI) [Howard et al.], 421
intravenous clonidine use in a neonate experiencing opioid-induced myoclonus (CR) [McClain et al.], 549
minimum alveolar concentration of volatile anesthetics in rats during postnatal maturation (LI) [Orliaguet et al.], 734
opioid action on respiratory neuron activity of the isolated respiratory network in newborn rats (LI) [Takeda et al.], 740
Nitric oxide and nitric oxide synthase
antiallodynic effect of intrathecal neostigmine is mediated by spinal nitric oxide in a rat model of diabetic neuropathic pain (LI) [Chen et al.], 1007
halothane but not isoflurane attenuates interleukin 1β-induced nitric oxide synthase in vascular smooth muscle (LI) [Maeda et al.], 492
intravenous anesthetics inhibit nonadrenergic noncholinergic lower esophageal sphincter relaxation *via* nitric oxide-cyclic guanosine monophosphate pathway modulation in rabbits (LI) [Kohjitani et al.], 176
new mechanisms for inhaled NO: release of an endogenous NO inhibitor? (EV) [Johns], 3
role of endothelium in the action of isoflurane on vascular muscle of isolated mesenteric resistance arteries (LI) [Izumi et al.], 990
sedative but not analgesic α_2 agonist tolerance is blocked by NMDA receptor and nitric oxide synthase inhibitors (LI) [Davies et al.], 184
Nitric oxide inhalation
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pulmonary vasoconstriction during regional nitric oxide inhalation: evidence of a blood-borne regulator of nitric oxide synthase activity (LI) [Hambraeus-Jonzon et al.], 102
successful use of combined high-frequency oscillatory ventilation, inhaled nitric oxide, and prone positioning in the acute respiratory distress syndrome (CR) [Varkul et al.], 797
Nitrogen
nitrogen at raised pressure interacts with the $GABA_A$ receptor to produce its narcotic pharmacological effect in the rat (LI) [David et al.], 921
Nitroglycerin and nitroprusside
nitroglycerine and sphincter of Oddi spasm (CO) [Bittar], 1046
Nitrous oxide
cerebral blood volume (CBV) in humans during normo- and hypocapnia: influence of nitrous oxide (N_2O) (CI) [Reinstrup et al.], 1079
intracuff pressure and tracheal morbidity: influence of filling cuff with saline during nitrous oxide anesthesia (CI) [Combes et al.], 1120
nitrous oxide activates GABAergic neurons in the spinal cord in Fischer rats (LI) [Hashimoto et al.], 463
randomized controlled trial of total intravenous anesthesia with propofol *versus* inhalation anesthesia with isoflurane-nitrous oxide: postoperative nausea and vomiting and economic analysis (CI) [Visser et al.], 616
NMDA and NMDA receptors
pain models display differential sensitivity to Ca^{2+}-permeable non-NMDA glutamate receptor antagonists (LI) [Sorkin et al.], 965
sedative but not analgesic α_2 agonist tolerance is blocked by NMDA receptor and nitric oxide synthase inhibitors (LI) [Davies et al.], 184
Nociception. *See also* **Antinociception; Pain physiology and pharmacology**
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Nonsteroidal anti-inflammatory drugs (NSAIDs)
spinal-epidural hematoma following epidural anesthesia in the presence of antiplatelet and heparin therapy (CR) [Litz et al.], 1031
Norepinephrine
possible involvement of cyclic adenosine monophosphate-independent mechanism in the positive chronotropic effect of norepinephrine in the isolated guinea pig right atrium (LI) [Asada and Endou], 437

O

Obstetric anesthesia
anesthesia for cesarean delivery in a patient with an undiagnosed traumatic diaphragmatic hernia (CR) [Dietrich and Smith], 1028
Birnbach, Datta, and Gatt, *Textbook of Obstetric Anesthesia* (EM) [Owen], 1308
Birnbach (ed.), *Ostheimer's Manual of Obstetric Anesthesia*, 3rd edition (EM) [Hays], 1047
combined spinal-epidural *versus* epidural labor analgesia (CI) [Norris et al.], 913
comparison of metaraminol and ephedrine infusions for maintaining arterial pressure during spinal anesthesia for elective cesarean section (CI) [Ngan Kee et al.], 307
effect of epidural analgesia with ambulation on labor duration (CI) [Vallejo et al.], 857
mask induction with sevoflurane in a parturient with severe tracheal stenosis (CR) [Ratner et al.], 553
Norris, *Handbook of Obstetric Anesthesia* (EM) [Paech], 276
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role of the atrial natriuretic factor in obstetric spinal hypotension (CI) [Frölich], 371
sickle cell-induced peripheral neuropathy following spinal anesthesia for cesarean delivery (CR) [Tsen and Cherayil], 1298
spinal ropivacaine for cesarean section: a dose finding study (CI) [Khaw et al.], 1346
systemic toxicity of levobupivacaine, bupivacaine, and ropivacaine during continuous intravenous infusion to nonpregnant and pregnant ewes (LI) [Santos and DeArmas], 1256
Obstruction, airway. *See* **Airway management**
Ondansetron
antagonism of the 5-HT_3 receptor does not alter isoflurane MAC in rats (LR) [Rampil et al.], 562
Ophthalmic anesthesia
ophthalmic blocks at the medial canthus (CO) [Lopatka et al.], 1533
ophthalmic blocks at the medial canthus (CO) [Ripart], 1533 (reply)
Opioids
activation of μ-opioid receptor induces expression of c-*fos* and *junB via* mitogen-activated protein kinase cascade (LI) [Shoda et al.], 983
cervico-medullary intrathecal injection of morphine produces antinociception in the orofacial formalin test in the rat (LI) [Grabow et al.], 1427
comparison of five experimental pain tests to measure analgesic effects of alfentanil (CI) [Luginbühl et al.], 22
effect of direct fetal opioid analgesia on fetal hormonal and hemodynamic stress response to intrauterine needling (CI) [Fisk et al.], 828
improved, but not preemptive, analgesia (CO) [Daley and Norman], 565
intravenous clonidine use in a neonate experiencing opioid-induced myoclonus (CR) [McClain et al.], 549
local administration of morphine for analgesia after iliac bone graft harvest (CI) [Reuben et al.], 390
morphine-induced spinal release of adenosine is reduced in neuropathic rats (LI) [Sandner-Kiesling et al.], 1455
a new model of electrically evoked pain and hyperalgesia in human

skin: the effects of intravenous alfentanil, S(+)-ketamine, and lidocaine (CI) [Koppert et al.], 395
opioid action on respiratory neuron activity of the isolated respiratory network in newborn rats (LI) [Takeda et al.], 740
opioid peptide-expressing leukocytes: identification, recruitment, and simultaneously increasing inhibition of inflammatory pain (LI) [Rittner et al.], 500
preemptive analgesia by intravenous low-dose ketamine and epidural morphine (CO) [McCulloch et al.], 565
rhinorrhea by nasal fentanyl (CO) [Ueda], 812
spinal endogenous acetylcholine contributes to the analgesic effect of systemic morphine in rats (LI) [Chen and Pan], 525
subarachnoid sufentanil for early postoperative pain management in orthopedic patients – more disadvantages than benefits? (CO) [Gebhard et al.], 1531
transfer half-life of morphine-6-β-glucuronide from plasma to effect site assessed by pupil size measurement in healthy volunteers (CI) [Lotsch et al.], 1329
when is preemptive analgesia truly preemptive? (CO) [Aida et al.], 566
when is preemptive analgesia truly preemptive? (CO) [Sarantopoulos and Fassoulaki], 565

Oropharyngeal airway, cuffed. *See* **Laryngeal mask airway and COPA**

Orthopedic surgery. *See* **Joint replacement surgery**

Osmotic pressure
effects of mild hypothermia on blood-brain barrier disruption during isoflurane or pentobarbital anesthesia (LI) [Chi et al.], 933

Outcomes
cardiac and neurologic complications identify risks for mortality for both men and women undergoing coronary artery bypass graft surgery (CI) [Hogue et al.], 1074
fatal hepatitis associated with isoflurane exposure and CYP2A6 autoantibodies (CR) [Martin et al.], 551
postoperative sudden death in two adolescents with myelomeningocele and unrecognized arrhythmogenic right ventricular dysplasia (CR) [Houfani et al.], 257
two cases of fatal thrombosis after aminocaproic acid therapy and deep hypothermic circulatory arrest (CR) [Fanshawe et al.], 1525

Outpatient surgery. *See* **Ambulatory care**

Oxygen and oxygen transport
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acute failure of oxygen delivery (CO) [Ong et al.], 1038
acute hemodilution in a chronic polycythemic patient may be deleterious (CR) [van Bommel et al.], 1291
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